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AMENDMENT TRANSMITTAL

PATENT

Application No.: 09/588,875
Filing Date: June 6, 2000
First Named Inventor: Shekhar Kirani
Examiner's Name: David E. England
Art Unit: 2143
Attorney Docket No.: 006783.P003

- ☐ An Amendment After Final Action (37 CFR 1.116) is attached and applicant(s) request expedited action.
- ☒ Charge any fee not covered by any check submitted to Deposit Account No. 02-2666.
- ☒ Applicant(s) hereby request and authorize the U.S. Patent and Trademark Office to (1) treat any concurrent or future reply that requires a petition for extension of time as incorporating a petition for extension of time for the appropriate length of time and (2) charge all required fees, including extension of time fees and fees under 37 CFR 1.16 and 1.17, for any concurrent or future reply to Deposit Account No. 02-2666.
- ☐ Applicant(s) claim small entity status (37 CFR 1.27).

ATTACHMENTS

- ☐ Preliminary Amendment
- ☐ Amendment/Response with respect to Office Action
- ☐ Amendment/Response After Final Action (37 CFR 1.116) (reminder: consider filing a Notice of Appeal)
- ☐ Notice of Appeal
- ☐ RCE (Request for Continued Examination)
- ☐ Supplemental Declaration
- ☐ Terminal Disclaimer (reminder: if executed by an attorney, the attorney must be properly of record)
- ☐ Information Disclosure Statement (IDS)
- ☐ Copies of IDS citations
- ☐ Petition for Extension of Time
- ☐ Fee Transmittal Document (that includes a fee calculation based on the type and number of claims)
- ☐ Cross-Reference to Related Application(s)
- ☐ Certified Copy of Priority Document
- ☒ Other: Appellant's Brief Transmittal, Replacement Appeal Brief
- ☐ Other: _____
- ☐ Check(s)
- ☒ Postcard (Return Receipt)

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Attorney's Docket No. 006783.P003

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In Re Application of:

Shekhar Kirani, et al.

Application No: 09/588,875

Filing Date: June 6, 2000

For: System and Methodology Providing
Access to Photographic Images and
Attributes for Multiple Disparate Client
Devices

Examiner: David E. England

Art Unit: 2143

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APPELLANT'S BRIEF TRANSMITTAL

Sir:

Enclosed for consideration is Appellant's Appeal Brief pursuant to C.F.R. §1.192
for the above-referenced case. This Replacement Appeal Brief is submitted in
response to the Notice of NonCompliant Appeal Brief mailed August 11, 2006.

If there are any additional charges, please charge Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN

Dated: September 11, 2006

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In Re Application of:

Shekhar Kirani, et al.

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Filing Date: June 6, 2000

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REPLACEMENT APPEAL BRIEF

Pursuant to 37 C.F.R. § 1.192, Appellants submit the following Appeal Brief for consideration by the Board of Patent Appeals and Interferences ("Board"). Appellants also submit herewith a check in the amount of \$500.00 to cover the cost of filing this opening brief, as set forth in 37 C.F.R. § 1.17(c). Please charge any additional amounts due or credit any overpayment to Deposit Account No. 02-2666.

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I. REAL PARTY IN INTEREST

LightSurf Technologies, Inc., Santa Cruz, CA, a wholly owned subsidiary of Verisign, Inc. of Mountain View, CA is the real party in interest.

II. RELATED APPEALS AND INTERFERENCES

There are no related appeals or interferences that will directly affect, be directly affected by, or have a bearing on the Board's decision in this appeal.

III. STATUS OF CLAIMS

Claims 1-12, 14-19, 22-29, 31-36, 38-44 and 46-70 are pending in this application. Claims 13, 20, 30, 37, and 45 were previously cancelled. All pending claims stand rejected. Claims 1-12, 14-19, 22-29, 31-36, 38-44 and 46-70 are presented for appeal.

IV. STATUS OF AMENDMENTS

No amendments were filed subsequent to the final rejection.

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

A. Claims 1-12, 14-19, 22-29, 31-35

In an online system, a method for providing digital photographic images to target devices is described (Abstract). The method comprising receiving a request to provide a target device with a copy of a particular photographic image (Specification, page 6, lines 14-17). The method further comprises determining capabilities of the target device, and based on the capabilities of the target device, determining an image format that is desired for providing the target device with a copy of the particular photographic image. (Specification, page 6, line 20-28). The method then generates a cache lookup key based on the identity of the particular photographic image and the image format that

is desired. (Specification, page 16, lines 22-25 and page 18 line 29 to page 19 line 3, and Figure 4A, block 403, Figure 4C, block 432). The process then determines whether a cached copy of the particular photographic image already exists in said determined image format using the cache lookup key. (Specification, page 18, line 25 to page 19 line 3, Figure 4C, block 433). If a cached copy exists, providing the target device with the cached copy of the particular photographic image. (Specification page 16, lines 25-27). If a cached copy does not exist, translating the particular photographic image into a copy having said determined image format (Specification, page 19, line 10), and providing the target device with the copy having said determined image format. (Specification, page 17, lines 2-5, Figure 4A, block 407).

In one embodiment, the process stores the copy having said determined format in a cache memory. (Specification, page 17, lines 2-4, Figure 4A, block 406).

Upon receiving from the target device a subsequent request for the particular photographic image, providing the target device with the copy stored in said cache memory. (Specification, page 17, lines 22-27).

In one embodiment, the request specifies a photographic identifier (photo ID). (Specification, page 16, lines 10-13). The photo ID comprises a unique ID created by said online system for identifying photographic images. (Specification, page 16, lines 13-16). In one embodiment, the photo ID is created from one or more of the following: an auto-incrementing counter, and a system time stamp. (Specification, page 15, lines 7-9).

The cache lookup key is based on a device type and the photo ID. (Specification, page 16, lines 22-25 and page 18 line 29 to page 19 line 3, and Figure

4A, block 403, Figure 4C, block 432). The cache lookup key is a hash of the photo ID and parameters of the target device. (Specification, page 18, line 29 to page 18 line 3, Figure 4C, block 432).

In one embodiment, the request specifies a user identifier (user ID). (Specification, page 16, lines 10-12). The user ID comprises a unique ID created by said online system for identifying users. (Specification, page 16, lines 10-16).

In one embodiment, the capabilities of the target device include: screen resolution, screen size, color support, and currently-available communication medium that the target device employs to transmit its request. (Specification, page 14, lines 1-9, and originally filed claims 11-14).

In one embodiment, determining the capabilities of the device comprises querying the device for its capabilities. (Specification, page 6, lines 4-8). In one embodiment, determining capabilities of the target device includes determining capabilities from a knowledgebase, based on a device class for the target device. (Specification page 17, line 27 to page 18, line 9). In one embodiment, determining a format that is desired comprises one or more of the following: determining an appropriate resolution for rendering the particular photographic image at the target device, determining an appropriate color space for rendering the particular photographic image at the target device, and determining an appropriate image size for rendering the particular photographic image at the target device. (Specification, page 4, line 26 to page 5, line 4, and page 17, line 21 to page 18, line 9)

In one embodiment, determining a format that is desired includes determining communication bandwidth available for transmitting a copy of the particular

photographic image to the target device. (Specification, page 19, line 13-22). In one embodiment, the communication bandwidth available is determined, at least in part, based on a device class for the target device. (Specification, page 19, line 12-13).

In one embodiment, determining a format that is desired includes determining user preferences, if any, for rendering images at the target device. (Specification, page 13, line 25-29).

In one embodiment, based on the capabilities of the target device, the process determines metadata for the particular photographic image that may be provided to the target device. (Specification, page 21, line 23-32). The metadata includes annotations for the particular photographic image. (Specification, page 21, line 18-22).

B. Claims 36, 38-44 and 46-66

An online photographic server system for providing digital photographic images to target devices is described (Abstract). The system comprises a storage module for storing digital photographic images for sharing among users. (Specification, page 6, line 1-3), a photographic server (Specification, page 6, line 1-3), for processing a request to provide a target device with a copy of a particular photographic image (Specification, page 6, line 14-17).

The system for automatically determining capabilities of the target device, and for providing the target device with a copy of the particular photographic image (Specification, page 6, line 20-28), said copy being automatically translated into a particular image format based on the capabilities of the target device (Specification, page 19, line 10). The system further including a cache memory to store translated copies of photographic images, the cache memory having a cache lookup key based on

the identity of the particular photographic image and the image format that is desired. (Specification, page 16, lines 22-25 and page 18 line 29 to page 19 line 3, and Figure 4A, block 403, Figure 4C, block 432).

The photographic server first uses the cache lookup key to attempts to satisfy the request by retrieving a copy of the particular photographic image having the particular format from the cache memory. (Specification, page 18, line 25 to page 19, line 3, Figure 4C, block 433).

Each digital photographic image stored by said storage module is associated with a photographic identifier (photo ID). (Specification, page 16, lines 13-16). The request includes the photo ID for said particular photographic image. (Specification, page 16, lines 10-13). The photo ID is created from one of the following: an auto-incrementing counter, and a system time stamp. (Specification, page 15, lines 7-9).

The request specifies a user identifier (user ID), and wherein said system stores information associating each user with one or more particular digital photographic images. (Specification, page 16, lines 10-12).

T the capabilities of the target comprise one or more of the following: device include screen resolution, screen size, color support, currently-available communication medium that the target device employs to transmit its request. (Specification, page 14, lines 1-9, and originally filed claims 11-14).

The photographic server includes the ability to query the target device for its capabilities. (Specification, page 6, lines 4-8). The photographic server includes a knowledgebase for determining the capabilities of the target device. (Specification page 17, line 27 to page 18, line 9). The image format is selected based on an appropriate

resolution for rendering the particular photographic image at the target device.

(Specification page 7, lines 3-5).

The image format is selected based on an appropriate color space for rendering the particular photographic image at the target device. The format is selected based on an appropriate image size for rendering the particular photographic image at the target device. The format is selected based on communication bandwidth available for transmitting a copy of the particular photographic image to the target device.

(Specification, page 4, line 26 to page 5, line 4, and page 17, line 21 to page 18, line 9)

The communication bandwidth available is determined, at least in part, based on a device class for the target device. (Specification, page 19, line 12-13).

The particular format is selected, at least in part, based on user preferences, if any, for rendering images at the target device. (Specification, page 13, line 25-29).

The storage system stores metadata for each of the digital photographic images, and wherein the photographic server is capable of determining metadata for the particular photographic image that may be provided to the target device. (Specification, page 21, line 18-32). The metadata includes annotations for the particular photographic image. (Specification, page 21, line 18-32).

C. Claims 67-70

A system to provide media to a plurality of clients comprising a communication means to receive a request a particular media from a client. (Figure 3A, connection between target devices 310 and photographic server system 350, Specification, page 13, lines 19-23). A cache memory to store translated copies of the media, the translated copies formatted for various clients (Specification, page 13, line 27 to page

14, line 1, and Figure 3B, block 359). A cache lookup logic to use a cache lookup key based on an identity of the particular piece of media and parameters of the requesting client. (Specification, page 6, lines 26-28). A translation mechanism to translate the media into the proper image format, if the media is not in the cache in the proper image format. (Specification, page 7, lines 2-5).

The cache lookup key is based on a media ID associated with the particular piece of media. The cache lookup key is further based on a device type of the requesting client at a particular resolution (Specification, page 16, lines 22-25 and page 18 line 29 to page 19 line 3, and Figure 4A, block 403, Figure 4C, block 432).

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

Examiner rejected claims 1-5, 7, 9, 11, 12, 14-19, 24-27, 31, 32, 36, 38-43, 46-53, 56-59, 62, 63 and 67-69 under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent No. 6,438,576 to Huang et al. in view of U.S. Patent No. 6,389,460 to Stewart et al.

Examiner rejected claims 6 and 41 under 35 U.S.C. §103(a) as being unpatentable over Huang in view of Stewart in further view of U.S. Patent No. 6,202,097 to Foster et al.

Examiner rejected claims 8 and 70 under 35 U.S.C. §103(a) as being unpatentable over Huang in view of Stewart in further view of U.S. Patent No. 6,289,375 to Knight et al.

Examiner rejected claims 12 and 44 under 35 U.S.C. §103(a) as being unpatentable over Huang in view of Stewart in further view what is well known in the art.

Examiner rejected claims 10, 22, 23, 54, and 55 under 35 U.S.C. §103(a) as being unpatentable over Huang in view of Stewart in further view of U.S. Patent No. 6,141,686 to Jackowski et al.

Examiner rejected claims 28 and 60 under 35 U.S.C. §103(a) as being unpatentable over Huang in view of Stewart in further view of the Appellant's admitted prior art.

Examiner rejected claims 29, 33-35, 61, and 64-66 under 35 U.S.C. §103(a) as being unpatentable over Huang in view of Stewart in further view of U.S. Patent No. 6,411,685 to O'Neal.

VII. ARGUMENT

A. Overview of Cited References

1. U.S. Patent No. 6,438,576 to Huang, et al. ("Huang")

Huang discusses a distributed object rendering system for a collaborative data network. The caching in Huang is based on bandwidth and relative load of each of the proxies. (Abstract). The Examiner notes that Huang does not teach generating a cache lookup key based on the identity of the particular photographic image and the format specified by the Target device.

2. U.S. Patent No. 6,389,460 to Stewart, et al. ("Stewart")

Stewart discusses techniques for storing objects (e.g., images) in and retrieving objects from a storage device (e.g., image store) in a rapid and efficient manner. The

concept of Stewart is to store data in nested directories so a look-up sequence for a particular image can be speedier (rather than requiring long string comparisons).

However, Stewart does not discuss having multiple copies of a photographic image in different image formats stored in a cache, and performing a cache look-up based on the media format and image identity.

Stewart discusses the image retrieval as follows:

The operation of the database according the invention is as follows. Data is retrieved when an application or a user requests it using keys which identify the data. For example, the keys can include URL, cookie, authorization and image type. Data is written to the location identified by its associated keys.

(Stewart, column 11, lines 1-4). Stewart does not teach or suggest separately caching the image with various formats. In fact, Stewart does not discuss format-based differentiation of images. Rather, Stewart forms an image identification string by concentrating the URL, merged cookies, and authorizations (Figure 5, block 508). Stewart does not teach or suggest using a desired format in generating a lookup key.

The Examiner refers to column 11, line1-25 of Stewart, which discuss the operation of the database. Stewart states that "Data is retrieved when an application or a user requests it using keys which identify the data. For example, the keys can include URL, cookie, authorization and image type. Stewart then notes the disadvantage of a system that encodes a URL as a file, and stores the URL, cookie, and authorization as distinct information. Stewart then continues to provide a solution, which is nested directories. However, Stewart never discusses storing various formats of data, having a cache key based on such differentiation.

3. U.S. Patent No. 6,202,097 to Foster, et al. ("Foster")

Foster discusses a method of performing diagnostic functions in a multiprocessor system using a serial diagnostic bus. Foster does not discuss the use of caches at all.

4. U.S. Patent No. 6,289,375 to Knight, et al. ("Knight")

Knight discusses invoking network agent functions using a hash table. The only discussion of caches in Knight is in terms of having rules which specify whether a cache is available and the size of the cache. Knight does not discuss how the cache is used at all.

5. U.S. Patent No. 6,141,686 to Jackowski, et al. ("Jackowski")

Jackowski discusses a system for gathering network traffic statistics, and application and user names for network control. Jackowski does not discuss the use of caches at all.

6. U.S. Patent No. 6,411,685 to O'Neal, et al. ("O'Neal")

O'Neil discusses a unified messaging system using a thin web browser as the interface. O'Neil also does not discuss the use of caches.

Thus, of the references, only Huang and Stewart discuss the use of caches.

B. Grounds of Rejection #1: Claims 1-5, 7, 9, 11, 12, 14-19, 24-27, 31, 32, 36, 38-43, 46-53, 56-59, 62, 63 and 67-69 are not obvious under 35 U.S.C. §103(a) as being unpatentable over Huang in view of Stewart.

1. Claim Group I: Claims 1-5, 9, 11, 12, 14-16, 19, 24-27, 36, 38-43, 46-48, 51-53, 56-59, And 67-69 Are Not Obvious Over The References Because The References In Combination Do Not Teach Or Suggest a Cache Lookup Key Based On The Identity Of The Particular Photographic Image And The Image Format That Is Desired.

The Examiner notes that Huang does not teach or suggest a cache look-up key, but the Examiner suggests that Huang in view of Stewart makes the claim limitation of "a cache lookup key based on the identity of the particular photographic image and the image format that is desired." Appellants respectfully disagree.

Stewart discusses that keys can include URL, cookie, authorization and image type. The Examiner in the Advisory Action suggests that the "differentiating based on the identity of the particular photographic image and the media format specified are not recited in the rejected claims. Appellants respectfully disagree. Claim 1 specifically recites "generating a cache lookup key based on the identity of the particular photographic image and the image format that is desired and determining whether a cached copy of the particular photographic image already exists in said determined image format using the cache lookup key." This almost verbatim describes what the Examiner seems to assert is missing in the claim.

The Examiner then suggests performing a cache look-up on the media format and image identity is described in Huang. Yet, in the Office Action dated 10/20/2005, on page 3, item 11, the Examiner notes that "Huang does not specifically teach generating a cache lookup key based on the identity of the particular photographic image and the image format specified by the target device."

In fact, Huang does not teach or suggest "generating a cache lookup key" at all. Rather, Huang simply states that "At step 401, the object request handler 205 checks with the cache manager 207 to determine if the requested object is available in the cache." (Huang, column 7, lines 25-27). No discussion of how this "checking" occurs is

provided. Furthermore, Huang clearly teaches away from using a cache lookup key based on the image format. Huang notes that:

If a copy of the requested object can be found in the local cache, at step 402, the proxy server checks the cached object against the RHI to see if any further rendering is necessary. Note that the RHI contains the capability specification of the receiving device (i.e. the device that originally requested the object that was just found in the cache). By checking the RHI, the proxy server 110, 111, 112 can determine if any further rendering is necessary.

(Huang, column 7, lines 43-50). Thus, it is clear that the object retrieved from the cache is not customized to the image format specified by the target device.

Stewart discusses extensively how the items in the cache are retrieved. In particular, Stewart's cache is split into "slots" and "a slot is determined in one embodiment from not only the URL but also any cookies and authorization information that may exist. The identified slot then contains one or more object pointers that point to the objects within the slot." (Stewart, column 18, lines 17-21). Thus, since slots then include object pointers, Stewart does not provide a cache lookup key that can be used to "determine whether a cached copy of the particular image already exists.

However, Stewart does not teach or suggest separately caching the image with various formats and having a cache lookup key based on the identity of the image and the image format. In fact, Stewart does not discuss format-based differentiation of images. Rather, Stewart forms an image identification string by concentrating the URL, merged cookies, and authorizations (Figure 5, block 508). Stewart does not teach or suggest using a desired image format in generating a lookup key. The "image type" of Stewart is the specified image type in the URL.

Therefore, neither Huang nor Stewart, alone or in combination, teach or suggest "a cache lookup key based on the identity of the particular photographic image and the image format" as recited in claim 1. Therefore, claim 1, and its dependent claims 2-6, 9-12, 14-16, 19, 22-28 should be allowable over the references.

Claim 36 recites in part "a cache memory to store translated copies of photographic images, the cache memory having a cache lookup key based on the identity of the particular photographic image and the image format that is desired." As noted above, none of the references teach or suggest "a cache lookup key based on the identity of the particular photographic image and the image format that is desired."

Therefore, claim 36, and its dependent claims 38-44, 46-48, 51-60 should be allowable over the references.

Claim 67 recites in part "a cache lookup logic to use a cache lookup key based on an identity of the particular piece of media and parameters of the requesting client." Huang does not discuss the use of cache lookup keys at all. Stewart's key is based on a URL and cookies, but does not teach or suggest including the identity of the particular piece of media and parameters of the requesting client. In fact, Stewart does not teach or suggest exploring the "parameters of the requesting client." Therefore, claim 67, and its dependent claims 68-69 should be allowable over the references.

2. Claim Group II: Claim 7 is not obvious over the references because none of the references teach or suggest the cache lookup key is based on a device type and said photo ID.

The Examiner does not address the limitation that the cache lookup key is based on the device type. In particular, Huang does not address the use of cache lookup keys at all. Stewart does not address "device types" at all, and therefore cannot teach or suggest using the device type, to create a cache lookup key either.

Therefore, claim 7 is not obvious over Huang in view of Stewart.

3. Claim Group III: Claims 17 and 49 are not obvious over the references because none of the references teach or suggest that determining capabilities of the target device includes querying the device for its capabilities.

The Examiner suggests that Huang suggests querying a device for its capabilities. Appellants respectfully disagree. The cited-to portion of Huang, column 5, line 42 through column 6, line 4. However, that portion of Huang states the following:

Object renderings are performed by the proxies 110, 111, 112 based on objects retrieved from the content servers 120, 121. The specific device capabilities, referred to herein as receiver hint information (RHI), as well as the object data type (generally referred to herein as object-specific descriptor information) are included such as by being appended to the meta-information associated with requests and requested objects. The

RHI can be included with an object request by the requesting client device 130, 131, or by one of the proxies (e.g., the first proxy coupled to the requesting device.)

(Huang, column 5, line 42-47). Thus, the system of Huang does not query the device, but rather either receives the device data long with the requests, or generates the device data by a proxy.

Stewart does not address target device differentiation at all. Thus, neither Huang nor Stewart teach or suggest querying the device for its capabilities. Therefore, claims 17 and 49 are not obvious over Huang in view of Stewart, and should be held allowable.

4. Claim Group IV: Claims 18 and 50 are not obvious over the references because none of the references teach or suggest that determining the capabilities of the target device includes determining capabilities from a knowledgebase, based on a device class for the target device

The Examiner suggests that Huang teaches determining capabilities from a knowledgebase based on device class. Appellants respectfully disagree. Huang utilizes a device ID to determine device capabilities. A device ID is not a device class. As the Specification of the present invention points out, a device class is a broader classification such as a Palm handheld device, a set-top box, a phone with a WAP browser, or the like. (Specification, page 17, lines 28-29). A device ID, on the other hand, as is known in the art, identifies a particular device. Two Palm handheld devices will have different device IDs, even though they belong in the same device class. Therefore, Appellants respectfully submit that Huang does not teach or suggest determining capabilities based on a device class.

As previously noted, Stewart does not address device differentiation at all.

Therefore, claims 18 and 50 are not obvious over the references, and should be held allowable.

5. Claim Group VI: Claims 31-32 and 62 are not obvious over the references because none of the references teach or suggest determining metadata for the particular photographic image that may be provided to the target device based on the capabilities of the target device.

The Examiner suggests that Huang discusses determining metadata for the particular photographic image that may be provided to the target device based on the capabilities of the target device. Appellants respectfully disagree.

Huang discusses the use of PICS (Platform for Internet Content Selection), which specifies a method of sending meta-information concerning electronic content.

The PICS labels described by Huang are used to specify the format of a file (i.e. a pair of color ending and image size) which is used by the proxy servers for image rendering. (Huang, column 10, lines 20-35). The "device capability PICS label" is used in the image conversion process. (Huang, column 10, lines 46-51).

However, nowhere does Huang teach or suggest determining which metadata should be provided to the target device. The metadata discussed by Huang is provided to the proxy servers for rendering purposes. This is quite different than providing metadata to the target device. Appellants respectfully submit that Huang does not teach or suggest providing such metadata.

Stewart does not address the use of metadata at all, nor do the other references. Therefore, Appellants respectfully submit that claims 31-35 and 62 are not obvious over the references, and should be allowed.

D. Grounds of Rejection #2: Claims 6 and 41 are not obvious under 35 U.S.C. §103(a) as being unpatentable over Huang in view of Stewart in further view of U.S. Patent No. 6,202,097 to Foster et al.

1. Claim Group I: Claims 6 and 41 are not obvious over the references because none of the references teach or suggest a cache lookup key based on the identity of the particular photographic image and the image format that is desired.

As noted above, Huang in view of Stewart does not teach or suggest the generation of cache look-up keys based on the identity of a particular photographic image and the image format that is desired. Foster discusses a method of performing diagnostic functions in a multiprocessor system using a serial diagnostic bus. Foster does not discuss the use of caches at all.

Therefore, the combination of Huang, Stewart, and Foster alone or in combination, teach or suggest "a cache lookup key based on the identity of the particular photographic image and the image format" as recited in claim 1. Therefore, claim 1, and its dependent claim 6 should be allowable over the references.

Claim 36, on which claim 41 depends, recites in part "a cache memory to store translated copies of photographic images, the cache memory having a cache lookup key based on the identity of the particular photographic image and the image format that is desired." As noted above, none of the references teach or suggest "a cache lookup key based on the identity of the particular photographic image and the image format that is desired." Therefore, claim 36, and its dependent claim 41 should be allowable over the references.

E. Grounds of Rejection #3: Claims 8 and 70 are not obvious under 35 U.S.C. §103(a) as being unpatentable over Huang in view of Stewart in further view of U.S. Patent No. 6,289,375 to Knight et al.

1. Claim Group I: Claim 70 is not obvious over the references because none of the references teach or suggest a cache lookup key based on the identity of the particular photographic image and the image format that is desired.

Claim 67, on which claim 70 depends, recites in part "a cache lookup logic to use a cache lookup key based on an identity of the particular piece of media and parameters of the requesting client." Huang does not discuss the use of cache lookup keys at all. Stewart's key is based on a URL and cookies, but does not teach or suggest including the identity of the particular piece of media and parameters of the requesting client. In fact, Stewart does not teach or suggest exploring the "parameters of the requesting client." Therefore, claim 70, which depend son claim 67, should be allowable over the references

2. Claim Group II: Claim 8 is not obvious over the references because none of the references teach or suggest the cache lookup key is based on a device type and said photo ID.

The Examiner does not address the limitation that the cache lookup key is based on the device type. In particular, Huang does not address the use of cache lookup keys at all. Stewart does not address "device types" at all, and therefore cannot teach or suggest using the device type, to create a cache lookup key either. Knight does not address the use of caches, or cache lookup keys at all. Therefore, it does not remedy the shortcomings of Huang in view of Stewart.

Therefore, claim 8 is not obvious over Huang, in view of Stewart, further in view of Knight.

F. Grounds of Rejection #4: Claims 12 and 44 are not obvious under 35 U.S.C. §103(a) as being unpatentable over Huang in view of Stewart in further view what is well known in the art.

1. Claim Group I: Claims 12 and 44 are not obvious over the references because none of the references teach or suggest a cache lookup key based on the identity of the particular photographic image and the image format that is desired.

As discussed above, Huang and Stewart do not teach or suggest a cache look-up key based on the identity of the particular photographic image and the image format that is desired.

The Examiner then appears to suggest that the basis was finding this element is "reasonable inferences" which may be utilized. Yet, the Examiner has not explained what these inferences would be, and what the basis for these inferences is. To establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a claim must be considered in judging the patentability of that claim against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). The Examiner has failed to specify what inferences were used in this rejection, and where in the references these inferences were taught or suggested.

Therefore, Applicants respectfully submit that the rejection over Huang and Stewart in view of "what is well known in the art" was not appropriate, and requests withdrawal of these rejections.

G. Grounds of Rejection #5: Claims 10, 22, 23, 54, and 55 are not obvious under 35 U.S.C. §103(a) as being unpatentable over Huang in view of Stewart in further view of U.S. Patent No. 6,141,686 to Jackowski et al.

1. Claim Group I: Claims 10, 22, 23, 54, and 55 are not obvious over the references because none of the references teach or suggest a cache lookup key based on the identity of the particular photographic image and the image format that is desired.

Claims 10, 22, and 23 depend on claim 1, and incorporate its limitations. As discussed above, Huang in view of Stewart does not teach or suggest "a cache lookup key based on the identity of the particular photographic image and the image format that is desired." Jackowski discusses a system for gathering network traffic statistics, and application and user names for network control. Jackowski does not discuss the use of caches at all. Therefore, claims 10, 22, and 23 are not obvious over Huang, in view of Stewart, further in view of Jackowski.

Claims 54 and 55 depend on claim 36, and incorporate its limitations. As discussed above, Huang in view of Stewart does not teach or suggest "the cache memory having a cache lookup key based on the identity of the particular photographic image and the image format that is desired." Jackowski discusses a system for gathering network traffic statistics, and application and user names for network control. Jackowski does not discuss the use of caches at all. Therefore, claims 54 and 55 are not obvious over Huang, in view of Stewart, further in view of Jackowski.

H. Grounds of Rejection #6: Claims 28 and 60 are not obvious under 35 U.S.C. §103(a) as being unpatentable over Huang in view of Stewart in further view of the Appellant's admitted prior art.

1. Claim Group I: Claims 28 and 60 are not obvious over the references because none of the references teach or suggest a cache lookup key based on the identity of the particular photographic image and the image format that is desired.

Claim 28 depends on claim 1, and incorporates its limitations. As discussed above, Huang in view of Stewart does not teach or suggest "a cache lookup key based on the identity of the particular photographic image and the image format that is desired." Applicant's admitted prior art does not discuss caches or cache look-up keys at all. Therefore, claim 28 is not obvious over Huang, in view of Stewart, further in view of the admitted prior art.

Claims 60 depends on claim 36, and incorporates its limitations. As discussed above, Huang in view of Stewart does not teach or suggest "the cache memory having a cache lookup key based on the identity of the particular photographic image and the image format that is desired." The admitted prior art does not address caches or cache look-up keys at all. Therefore, claim 60 is not obvious over Huang, in view of Stewart, further in view of the admitted prior art.

I. Grounds of Rejection #7: Claims 29, 33-35, 61, and 64-66 are not obvious under 35 U.S.C. §103(a) as being unpatentable over Huang in view of Stewart in further view of U.S. Patent No. 6,411,685 to O'Neal, because O'Neal is non-analogous art, and therefore cannot be used to reject these claims.

The Examiner suggested that these claims are obvious over Huang in view of Stewart, further in view of O'Neal. The Examiner points to O'Neal to teach determining a format that is desired for rendering images at a target device.

O'Neal is drawn to a unified messaging system, in which messages are stored for a user. When the user requests the messages, the user may provide a preferred format for these messages to be displayed.

This is non-analogous to receiving a request for data, and on-the-fly identifying a preferred format for display, and using the preferred format data as a cache key lookup. Simply because O'Neal provides data in various user-preferred formats does not mean that one of skill in the art in image rendering on various devices would look to a static voice message system that provides user settings.

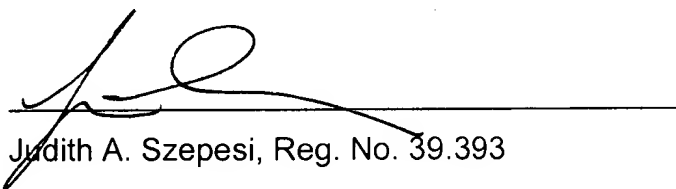
Therefore, claims 29 and 61 should not be considered obvious over Huang in view of Stewart further in view of O'Neal, and should be allowed.

VIII. CONCLUSION

Based on the foregoing, Appellants respectfully submit that that the Board should overturn the rejection of all pending claims and hold that all of the claims currently under review are allowable.

Respectfully submitted,

Dated: September 11, 2006



Judith A. Szepesi, Reg. No. 39.393

IX. CLAIMS APPENDIX

The claims involved in this appeal are presented below.

1. (Previously Presented) In an online system, a method for providing digital photographic images to target devices, the method comprising:

receiving a request to provide a target device with a copy of a particular photographic image;

determining capabilities of the target device;

based on the capabilities of the target device, determining an image format that is desired for providing the target device with a copy of the particular photographic image;

generating a cache lookup key based on the identity of the particular photographic image and the image format that is desired;

determining whether a cached copy of the particular photographic image already exists in said determined image format using the cache lookup key;

if a cached copy exists, providing the target device with the cached copy of the particular photographic image;

if a cached copy does not exist, translating the particular photographic image into a copy having said determined image format; and

providing the target device with the copy having said determined image format.

2. (Original) The method of claim 1, further comprising storing the copy having said determined format in a cache memory.

3. (Original) The method of claim 2, further comprising:
receiving from the target device a subsequent request for the particular photographic image; and
providing the target device with the copy stored in said cache memory.
4. (Original) The method of claim 1, wherein said request specifies a photographic identifier (photo ID).
5. (Original) The method of claim 4, wherein said photo ID comprises a unique ID created by said online system for identifying photographic images.
6. (Previously Presented) The method of claim 4, wherein said photo ID is created from one or more of the following: an auto-incrementing counter, and a system time stamp.
7. (Previously Presented) The method of claim 4, wherein the cache lookup key is based on a device type and said photo ID.
8. (Previously Presented) The method of claim 7, wherein the cache lookup key is a hash of the photo ID and parameters of the target device.
9. (Original) The method of claim 1, wherein said request specifies a user identifier (user ID).

10. (Original) The method of claim 9, wherein said user ID comprises a unique ID created by said online system for identifying users.

11. (Previously Presented) The method of claim 1, wherein the capabilities of the target device include one or more of the following: screen resolution, screen size, and color support.

12. (Previously Presented) The method of claim 1, wherein the photographic image is an artwork.

13. (Canceled)

14. (Original) The method of claim 1, wherein the capabilities of the target device include currently-available communication medium that the target device employs to transmit its request.

15. (Original) The method of claim 14, wherein currently-available communication medium comprises wireless communication.

16. (Original) The method of claim 14, wherein currently-available communication medium comprises wireline communication.

17. (Original) The method of claim 1, wherein said step of determining capabilities of the target device includes:

querying the device for its capabilities.

18. (Original) The method of claim 1, wherein said step of determining capabilities of the target device includes:

determining capabilities from a knowledgebase, based on a device class for the target device.

19. (Previously Presented) The method of claim 1, wherein said step of determining a format that is desired comprises one or more of the following:
determining an appropriate resolution for rendering the particular photographic image at the target device, determining an appropriate color space for rendering the particular photographic image at the target device, and determining an appropriate image size for rendering the particular photographic image at the target device.

20-21. (Cancelled)

22. (Original) The method of claim 1, wherein said step of determining a format that is desired includes:

determining communication bandwidth available for transmitting a copy of the particular photographic image to the target device.

23. (Original) The method of claim 22, wherein the communication bandwidth available is determined, at least in part, based on a device class for the target device.

24. (Original) The method of claim 1, wherein said target device includes a handheld computing device having display capability.

25. (Original) The method of claim 1, wherein said target device includes a cellular phone device having display capability.

26. (Original) The method of claim 1, wherein said target device includes a pager device having display capability.

27. (Original) The method of claim 1, wherein said target device includes a personal computer having display capability.

28. (Original) The method of claim 1, wherein said target device includes WAP (Wireless Application Protocol) support.

29. (Original) The method of claim 1, wherein said step of determining a format that is desired includes determining user preferences, if any, for rendering images at the target device.

30. (Canceled)

31. (Original) The method of claim 1, further comprising:

based on the capabilities of the target device, determining metadata for the particular photographic image that may be provided to the target device.

32. (Original) The method of claim 31, wherein said metadata includes attribute information for the particular photographic image.

33. (Original) The method of claim 32, wherein said metadata includes annotations for the particular photographic image.

34. (Original) The method of claim 33, wherein said annotations include text data.

35. (Original) The method of claim 33, wherein said annotations include voice data.

36. (Previously Presented) An online photographic server system for providing digital photographic images to target devices, the system comprising:
a storage module for storing digital photographic images for sharing among users; and
a photographic server:

for processing a request to provide a target device with a copy of a particular photographic image;

for automatically determining capabilities of the target device; and

for providing the target device with a copy of the particular photographic image, said copy being automatically translated into a particular image format based on the capabilities of the target device;

a cache memory to store translated copies of photographic images, the cache memory having a cache lookup key based on the identity of the particular photographic image and the image format that is desired.

37. (Canceled)

38. (Previously Presented) The system of claim 36, wherein said photographic server first uses the cache lookup key to attempts to satisfy the request by retrieving a copy of the particular photographic image having the particular format from the cache memory.

39. (Original) The system of claim 36, wherein each digital photographic image stored by said storage module is associated with a photographic identifier (photo ID).

40. (Original) The system of claim 39, wherein said request includes the photo ID for said particular photographic image.

41. (Previously Presented) The system of claim 40, wherein said photo ID is created from one of the following: an auto-incrementing counter, and a system time stamp.

42. (Original) The system of claim 36, wherein said request specifies a user identifier (user ID), and wherein said system stores information associating each user with one or more particular digital photographic images.

43. (Previously Presented) The system of claim 36, wherein the capabilities of the target comprise one or more of the following: device include screen resolution, screen size, color support.

44. (Previously Presented) The system of claim 36, wherein the photographic image is an artwork.

45. (Canceled)

46. (Original) The system of claim 36, wherein the capabilities of the target device include currently-available communication medium that the target device employs to transmit its request.

47. (Original) The system of claim 36, wherein currently-available communication medium comprises wireless communication.

48. (Original) The system of claim 36, wherein currently-available communication medium comprises wireline communication.

49. (Original) The system of claim 36, wherein said photographic server includes the ability to query the target device for its capabilities.

50. (Original) The system of claim 36, wherein said photographic server includes a knowledgebase for determining the capabilities of the target device.

51. (Original) The system of claim 36, wherein said particular format is selected based on an appropriate resolution for rendering the particular photographic image at the target device.

52. (Original) The system of claim 36, wherein said particular format is selected based on an appropriate color space for rendering the particular photographic image at the target device.

53. (Original) The system of claim 36, wherein said particular format is selected based on an appropriate image size for rendering the particular photographic image at the target device.

54. (Original) The system of claim 36, wherein said particular format is selected based on communication bandwidth available for transmitting a copy of the particular photographic image to the target device.

55. (Original) The system of claim 54, wherein the communication bandwidth available is determined, at least in part, based on a device class for the target device.

56. (Original) The system of claim 36, wherein said target device includes a handheld computing device having display capability.

57. (Original) The system of claim 36, wherein said target device includes a cellular phone device having display capability.

58. (Original) The system of claim 36, wherein said target device includes a pager device having display capability.

59. (Original) The system of claim 36, wherein said target device includes a personal computer having display capability.

60. (Original) The system of claim 36, wherein said target device includes WAP (Wireless Application Protocol) support.

61. (Original) The system of claim 36, wherein said particular format is selected, at least in part, based on user preferences, if any, for rendering images at the target device.

62. (Original) The system of claim 36, wherein the storage system stores metadata for each of the digital photographic images, and wherein the photographic server is capable of determining metadata for the particular photographic image that may be provided to the target device.

63. (Original) The system of claim 62, wherein said metadata includes attribute information for the particular photographic image.

64. (Original) The system of claim 62, wherein said metadata includes annotations for the particular photographic image.

65. (Original) The system of claim 64, wherein said annotations include text data.

66. (Original) The system of claim 64, wherein said annotations include voice data.

67. (Previously Presented) An system to provide media to a plurality of clients comprising:

a communication means to receive a request a particular media from a client;
a cache memory to store translated copies of the media, the translated copies formatted for various clients;
a cache lookup logic to use a cache lookup key based on an identity of the particular piece of media and parameters of the requesting client; and
a translation mechanism to translate the media into the proper image format, if the media is not in the cache in the proper image format.

68. (Previously Presented) The system of claim 67, wherein the media comprises one or more of the following: a photograph, images, a plurality of frames of images, and textual data.

69. (Previously Presented) The system of claim 67, wherein the cache lookup key is based on a media ID associated with the particular piece of media.

70. (Previously Presented) The system of claim 69, wherein the cache lookup key is further based on a device type of the requesting client at a particular resolution.

X. EVIDENCE APPENDIX

No other evidence is submitted in connection with this appeal.

XI. RELATED PROCEEDINGS APPENDIX

No related proceedings exist.